3.2 Working through a session

To work through a tutorial or a workout:

1 Open the Tutorial/Workout screen, as illustrated in Figure 73.

Figure 73 Tutorial/Workout screen

Note: *For details on how to open this screen, see "Using Destination MATH" Section 1.4 - page 16.*

3.2.1 Tutorial

To work through a tutorial:

1 Click on the **Tutorial** (**T**) button from the tutorial/workout screen. This will open the tutorial opening screen, as illustrated in Figure 74.

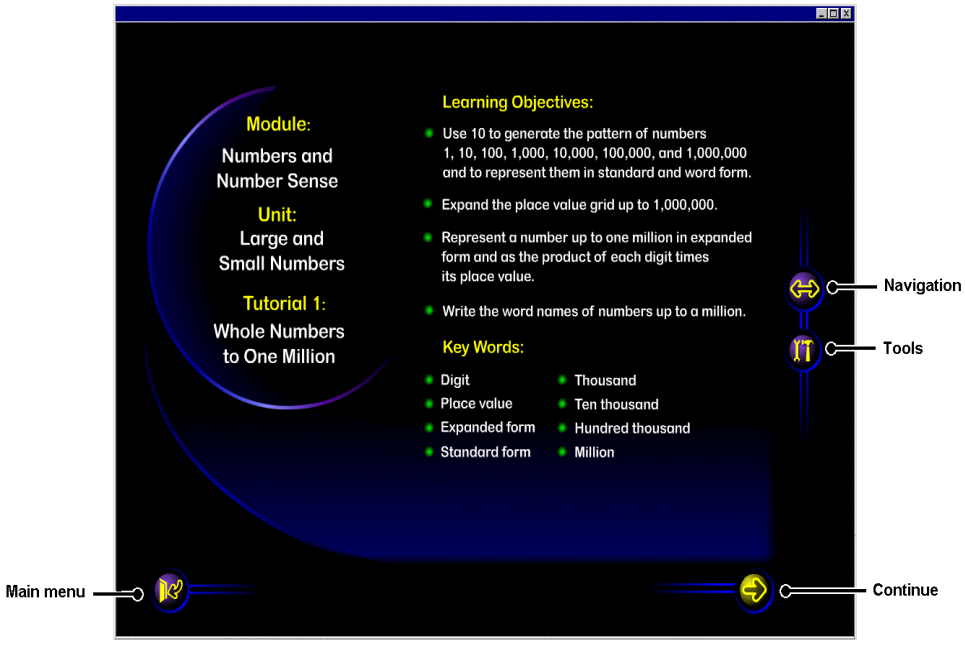

Module:
Numbers and Number Sense
Unit:
Large and Small Numbers
Tutorial 1:
Whole Numbers to One Million
Learning Objectives:
Use 10 to generate the pattern of numbers 1, 10, 100, 1,000, 10,000, 100,000, and 1,000,000 and to represent them in standard and word form.
Expand the place value grid up to 1,000,000.
Represent a number up to one million in expanded form and as the product of each digit times its place value.
Write the word names of numbers up to a million.
Key Words:
Digit
Place value
Expanded form
Standard form
Thousand
Ten thousand
Hundred thousand
Million
Navigation
Tools
Main menu
Continue

Figure 74 Tutorial opening screen

Note: *For details on using these screens, see "User interface" Section 3.2.4 - page 14.*

3.2.1.1 Screen display

The following are the items displayed on the opening screen:

MODULE The module title.

UNIT The unit title.

TUTORIAL The title of the chosen tutorial.

LEARNING OBJECTIVES The learning objectives outlining what is to be covered in the tutorial.

KEY WORDS The key words used in the tutorial. The student will see these words used during the working of the tutorial.

MENU Clicking this button will return the student to the main menu screen.

CONTINUE Clicking this button will continue the tutorial.

2 Click the **Continue** button. This will open the tutorial's first screen, as illustrated in Figure 75.

Figure 75 Mastering Skills and Concepts tutorial screen

3 Click the **Continue** button to proceed with the tutorial and follow the instructions on the screen and/or given in the narration.

3.2.2 Practice Area

Students have opportunities during tutorials to answer questions in an environment called Practice Area. These are sets of questions that focus on content covered during particular segments of a tutorial. Practice Areas are presented at the conclusion of the screen that presented the mathematical content.

Questions vary in form. Some are multiple choice, others are text entry.

Many of the questions contain a dynamic environment that allows students to investigate properties of the number line and rectangular coordinate plane as they attempt to answer each question.

These dynamic environments include:

- drag a given point to a new position on the number line
- drag a given point to a new position on the rectangular coordinate plane
- drag a given point to a new position on a given line
- rotate and/or translate a given line
- rotate a pair of parallel or perpendicular lines
- rotate and/or translate the boundary line of a linear inequality.

Student performance on Practice Area questions is maintained in the management system as part of the student reporting. This progress report includes how the student responded to each question and if the student accessed the solution and also maintains the report of the best results on each set of questions.

After the last question of the Practice Area set has been answered, a score table is displayed on screen. This table reflects how the student responded to each question: Correct, Incorrect, or Not Attempted.

Students may answer the same sets of questions over various sessions as part of the review or as remediation activity.

3.2.2.1 Working the Practice Area

To work the Practice Area:

1 Open a tutorial or workout screen.

2 Click the **Navigation panel** button.

3 Click the **P** button, where available, on the navigation panel.

4 Click the **OK** button, or press the **<Return>** or **<Enter>** key. This will open the Practice Area opening window, as illustrated in Figure 76.

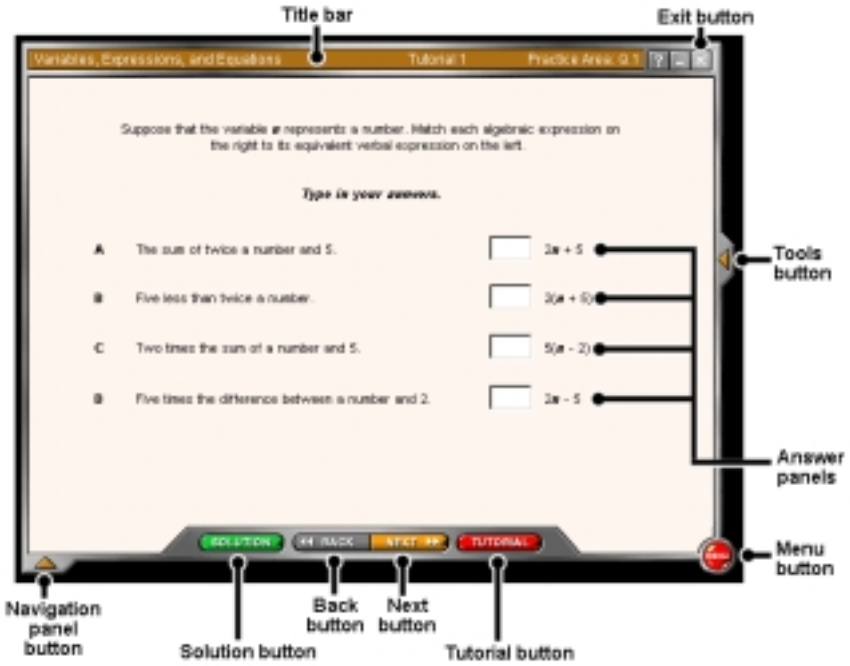


Figure 76 Practice Area opening window

5 Type the numbers in the box opposite the question on the screen using the keyboard keys. *(The above window is an example only)*.

SCREEN DISPLAY

The following items are displayed on the Practice Area screen:

Title bar The title bar contains details of the Practice Area entered. It contains the unit name, the tutorial number and the Practice Area question number.

Exit button This closes the Practice Area screen. When the exit button is clicked the following message appears:

This will return you to the Menu

Click the **OK** button or press the **<Return>** or **<Enter>** key. This will open the Practice Area score window, as illustrated in Figure 77.

Figure 77 Practice Area score window

Click the **OK** button, or press the **<Return>** or **<Enter>** key to return to the menu screen. The Practice Area window shows the number of questions in the Practice Area for a chosen tutorial, the number of the question answered incorrectly, the number of the question answered correctly, and the number of the question not attempted.

Answer box Type your answer into these boxes using the keyboard keys.

When all questions have been attempted, clicking the **Next** button will display the following message:

This will return you to the Tutorial

For details of the remainder of this procedure, see the Exit button item.

Menu button Click this button to return to the menu screen. The following message appears:

This will return you to the Menu

For details of the remainder of this procedure, see the Exit button item.

Tutorial button Click this button to return to the tutorial. The following message appears:

This will return you to the Tutorial

For details of the remainder of this procedure see the Exit button item.

Next button Click this button to proceed to the next question in the Practice Area. Clicking this button at the end of all questions in the Practice Area displays the following message:

This will return you to the Tutorial

For details of the remainder of this procedure, see the Exit button item.

Back button Click this button to go back to the previous question in the Practice Area.

Solution button Click this button to display the correct answer along with a brief solution to the question being posed. This will open the solution window, as illustrated in Figure 78.

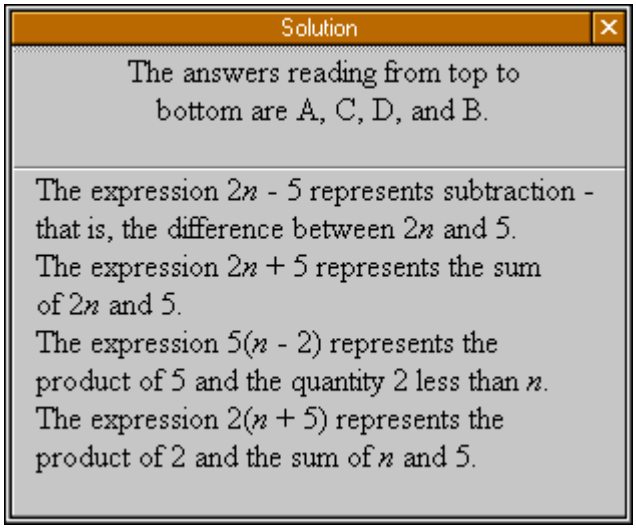

Solution
The answers reading from top to bottom are A, C, D, and B.
The expression 2n - 5 represents subtraction - that is, the difference between 2n and 5.
The expression 2n + 5 represents the sum of 2n and 5.
The expression 5(n - 2) represents the product of 5 and the quantity 2 less than n.
The expression 2(n + 5) represents the product of 2 and the sum of n and 5.

Figure 78 Practice Area solution

Click the **X** button in the top right corner of the solution window, or press the **<Esc>** key. This will return you to the Practice Area window.

Note: *Once solutions have been viewed by a student, that specific question can no longer be attempted during the session.*

Navigation panel button Click this button to return to the tutorial screen with the navigation panel open.

3.2.3 Workout

To work through a workout:

1 Click on the **Workout** (**W**) button on the Tutorial/Workout screen. This will open the workout, as illustrated in Figure 79.

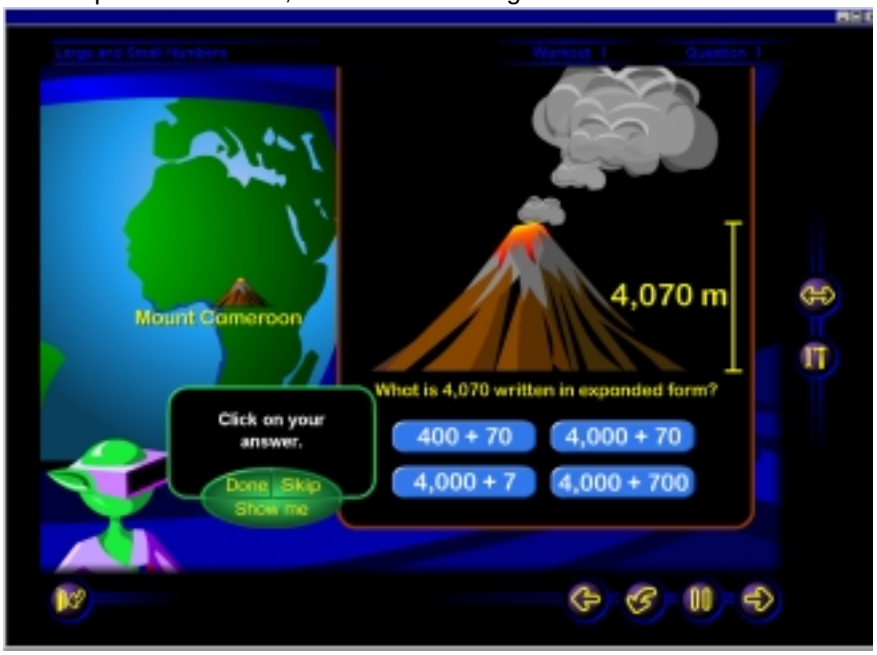


Figure 79 Mastering Skills and Concepts Workout screen

Note: *For details on using these screens, see "User interface" Section 3.2.4 - page 14.*

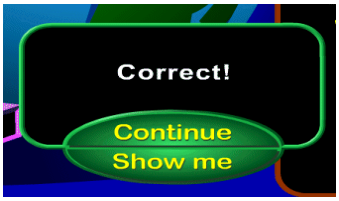
SCREEN DISPLAY The following are the items displayed on the workout screen:

Done Once they select an answer, students click the **Done** button or click the **Continue** button.

Skip Clicking this button skips the student to the next question without having to answer the existing question.

Show Me Clicking this button allows a student to see, in sequence, how the problem is solved.

2 When the **Done** button, or the **Continue** button is clicked, the following message will appear if the answer is correct:



Click the **Continue** button to continue the tutorial, or click the **Show Me** button to see a sequence of screens outlining how the problem is solved.

If the answer is incorrect, the following message will appear:

Click the **Yes** button to retry the question, click the **No** button to continue the tutorial without retrying the question, or click the **Show Me** button to see a sequence of screens outlining how the problem is solved.

SHOW ME

This allows a student to view, in sequence, the problem being solved. This is done through animation and narration. Show Me uses the **PACE** method, which is:

P: restates the **P**roblem.

A: **A**nalyzes the relationship between the elements.

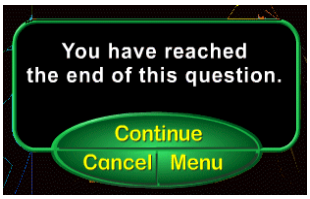
C: works through the steps in **C**alculating the answer.

E: **E**valuates the answer.

In Show Me, students may go back to the chosen workout question by clicking the **workout** button at the bottom of the screen, as illustrated in Figure 80.

Figure 80 Return to workout button

Note: *When a student has reached the end of a question, the following message appears:*



*Click the **Continue** button to continue to the next question, click the **Cancel** button to stay on the chosen screen, or click the **Menu** button to return to the main menu.*

3.2.4 User interface

The following items are found in the user interface screen:

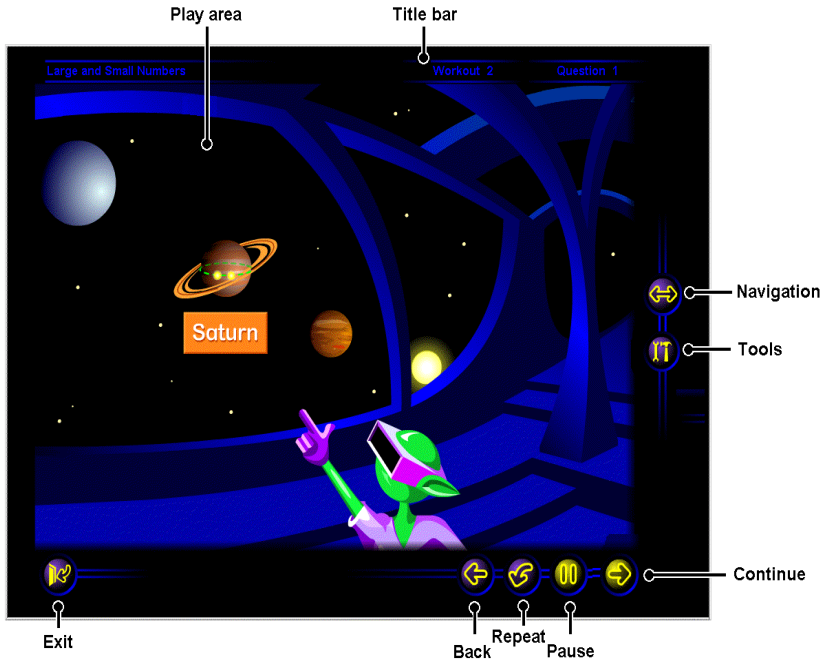


Figure 81 User interface screen

Clicking on the navigation panel button brings up the navigation panel:

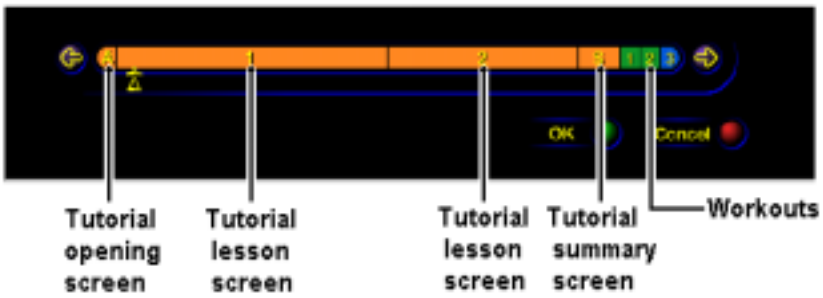


Figure 82 Navigation panel

3.2.4.1 Color code

Four colors are used to denote the different parts of the session that the user is in. The color definitions are:

ORANGE *Tutorial.*

GREEN *Workout level 1 question:* Question based on a basic understanding of one or more learning objectives from the preceding tutorial.

BLUE *Workout level 2 question:* Questions based on the application of one or more learning objectives.

PURPLE *Workout level 3 question:* Challenging questions based on one or more learning objectives that may include extraneous information.

3.2.4.2 Screen display

The following items are displayed on the screen:

CONTINUE Click this button to continue the session, follow the instructions on the screen, or the narration as the session progresses.

BACK Click this button to go back one step with each click.

REPEAT Click this button to repeat the last step.

MENU Click this button to go to the main menu.

TOOLS Click on this button to bring up the tools menu. The tools are:

Calculator Click this button to open the scientific calculator, as illustrated in Figure 83. Numbers may be entered by clicking the numbers on the calculator on the screen, or using the keyboard number keys.

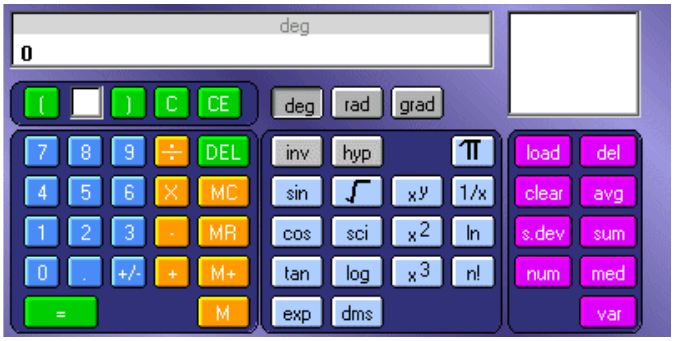


Figure 83 Calculator

Glossary Click this button to open a glossary of terms, as illustrated in Figure 84.

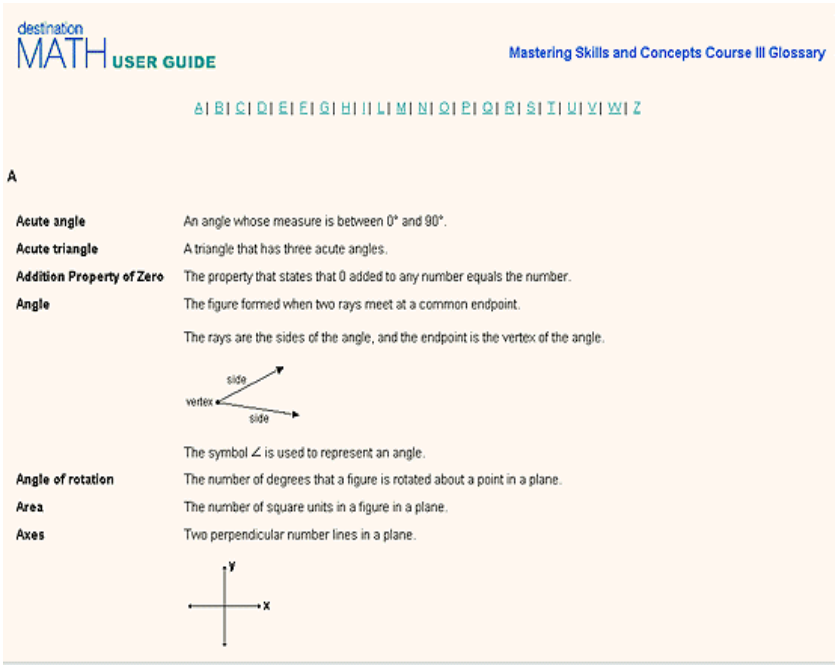

destination MATH USER GUIDE
Mastering Skills and Concepts Course III Glossary
A | B | C | D | E | F | G | H | I | L | M | N | O | P | Q | R | S | T | U | V | W | Z
A
Acute angle
An angle whose measure is between 0° and 90°.
Acute triangle
A triangle that has three acute angles.
Addition Property of Zero
The property that states that 0 added to any number equals the number.
Angle
The figure formed when two rays meet at a common endpoint.
The rays are the sides of the angle, and the endpoint is the vertex of the angle.
side
vertex
side
The symbol ∠ is used to represent an angle.
Angle of rotation
The number of degrees that a figure is rotated about a point in a plane.
Area
The number of square units in a figure in a plane.
Axes
Two perpendicular number lines in a plane.
y
x

Figure 84 Glossary

GRAPHING TOOL Click this button to open the Graphing tool. *For details of this item see "Launching the Graphing Tool" Section 4.1.1 - page 3.*

NAVIGATION PANEL Click this button to open the navigation panel. This panel contains:

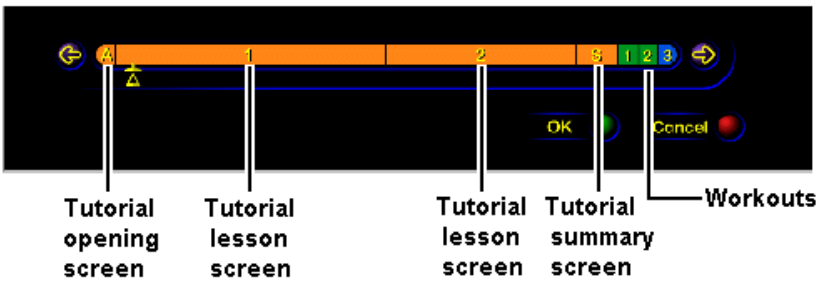


Figure 85 Mastering Skills and Concepts navigation panel

The navigation panel allows a student to go to any screen in a tutorial, or any question in a corresponding workout. The yellow indicator points to the student's current location, the available tutorial screens, a summary of the tutorial, and the difficulty levels of the workouts in the chosen session. The difficulty level is reflected in the colour coding: Type 1, green (easiest level); type 2, blue; and type 3, purple (most difficult level). Drag the yellow indicator to the tutorial or workout of choice, and click the **OK** button to go to the chosen screen. Click Summary (**S)** to go to the summary screen of the given tutorial.

On the *Mastering Algebra* navigation panel there is an additional button **P** (Practice button). *For details on this button, see "Working the Practice Area" Section 3.2.2.1 - page 7.*